

THE AUSTRALIAN HEDGEHOG (ECHIDNA HYSTRIX.)

Spiny Ant-eater.

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A SUB-SECTION of the family Marsupialia comprises the Monotremata, with only two known species, one of which, the Spiny Ant-eater, we figure. It is, like the Platypus, a strictly Australian animal, and inhabits almost every part of the Continent, from Cape Howe to Cape York, but is not found on the salt-bush plains of the interior. The Tasmanian species is more hairy, and has been noticed under another name (E. selosa), but both animals are only varieties. Dr. Shaw described the Echidna and the Platypus about the close of last century, and great interest was shown by anatomists and physiologists in these discoveries, which raised the unsolved question,—whether the two creatures laid eggs! The greatest men of science gave their opinion for and against this theory; and when Meckel (a well-known German anatomist) had actually discovered the mammary glands, proving thereby that the Echidna gave suck, Geoffroy St.-Hilaire (a great French savant) would not believe a word of it. Both naturalists have passed away, and it was left to Professor Owen to enlighten us on the manner in which the Spiny Ant-eater treats her young progeny. The condition in which the young come to light, covered by a shell or naked, we do not know; but a specimen forwarded to the Professor by Dr. v. Müller, of Melbourne (a full-grown female), contained two small apertures or pouches on the under side of the body, and these were occupied by two "little ones," then not much larger than a French bean. The milk-glands drained into these pouches, and supplied the necessary nourishment, but a teat could not be observed.

Professsor Owen has written a most elaborate treatise on the subject, to which we must refer our readers.*

The discovery took place a few years ago, so that at least forty years passed before the dispute was settled.

Even now we are as ignorant as possible about the habits and economy of this well-known animal, and we certainly cannot tell what becomes of our spiny friends in summer-time. A keen observer, Mr. Charles Kepert, of Soldier's Point, Port Stephens, who always supplies us with Echidnas in winter, is of opinion that these animals retire into the ground,—in fact, hibernate during the hot season. So much is certain—they cannot be obtained so easily in summer.

The Echidna is about 18 inches in length, of stout build; the upper parts covered with strong spines, underparts, head, and legs, clothed with brownish or blackish coarse hair; head with the facial portion prolonged into a slender and sloping snout, and covered with a naked skin; mouth-opening small; tongue long and flexible, with some horny, tooth-like ridges on the hinder part; legs short and strong, provided with five well-armed toes; tail short, covered with spines.

The food of the Echidna is said to consist of ants and other small insects, but we have on several occasions taken also grass from their stomachs. The jaw is toothless, but the ridges of horny tubercles before mentioned, and similar spines on the palate, probably assist in crushing the food.

The heel of the male is armed with a spur, which is movable, perforated, and supplied with a gland, and muscles capable of injecting the secretion of the gland through the canal of the spur, as in the Duck-mole. According to Messrs. Quoy and Gaimard the apparatus is not poisonous. We have often handled Echidnas, but never experienced any irritation when accidentally scratched by the spur.

The Echidna will live for months in captivity without taking food; and Mr. Kepert's suggestion that the animal feeds in winter only, and hibernates during summer, is by no means improbable. It is difficult to drown one, and from eight to ten minutes at least are necessary for the experiment. The animal is also tolerably snake-proof, and a specimen frequently bitten by some of our most venomous reptiles lived for ten hours. The strength of the Echidnas is most wonderful, and their digging capabilities will scarcely be credited. The animal often appears to be nailed to the ground, and if sheltered in some convenient corner, where the soil is stiff clay, a spade is necessary to dislodge it. In soft alluvial soil or sand, an Echidna will disappear before the observer's eyes without any apparent effort, gradually sinking out of sight.

The best means to secure a runaway is to obtain hold of one of the hind legs, when the animal is unable to resist any longer. The flesh is considered excellent.

^{*} On the Marsupial Pouches, Mammary Glands, and Mammary Foxtus of the Echidna Hystrix. By Professor R. Owen, F.R.S. Philosophical Transactions, 1865, p. 671.